

**Mobile Application Dev Lab**

**LAB ASSIGNMENT 01**



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**BSCS-36(A)**

**LAB TASK**

# LAB ASSIGNMENT

1. Create a new project in Android Studio.

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1. Change the "Hello World" greeting to "Happy Birthday to " and the name of someone with a recent birthday.

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| **activity\_main.xml**  <?xml version="1.0" encoding="utf-8"?> <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  xmlns:app="http://schemas.android.com/apk/res-auto"  xmlns:tools="http://schemas.android.com/tools"  android:id="@+id/main"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:background="@color/black"  tools:context=".MainActivity">  <TextView  style="@style/Widget.AppCompat.TextView.SpinnerItem"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Happy Birthday Mr. Ahad Raza"  android:textColor="#FFFDFD"  app:autoSizeTextType="uniform"  app:layout\_constraintBottom\_toBottomOf="parent"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintHorizontal\_bias="0.502"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toTopOf="parent"  app:layout\_constraintVertical\_bias="0.463" />  <TextView  android:id="@+id/textView"  style="@style/Widget.AppCompat.TextView.SpinnerItem"  android:layout\_width="189dp"  android:layout\_height="18dp"  android:text="BSCS-RC-294"  android:textAlignment="center"  android:textColor="#FFFFFF"  app:autoSizeTextType="uniform"  tools:ignore="MissingConstraints"  tools:layout\_editor\_absoluteX="16dp"  tools:layout\_editor\_absoluteY="16dp" /> </androidx.constraintlayout.widget.ConstraintLayout>    **MainActivity.java**  package com.example.labassignment01; import android.os.Bundle; import androidx.activity.EdgeToEdge; import androidx.appcompat.app.AppCompatActivity; import androidx.core.graphics.Insets; import androidx.core.view.ViewCompat; import androidx.core.view.WindowInsetsCompat;  public class MainActivity extends AppCompatActivity {   @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  EdgeToEdge.*enable*(this);  setContentView(R.layout.*activity\_main*);  ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  return insets;  });  } }  **Output:** |

1. A common use of the Log class is to log Java exceptions when they occur in your program. There are some useful methods, such as Log.e(), that you can use for this purpose. Explore methods you can use to include an exception with a Log message. Then, write code in your app to trigger and log an exception.

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| **Program**  **MainActivity.java**  package com.example.labassignment01;  import android.os.Bundle; import android.util.Log; // Import the Log class  import androidx.activity.EdgeToEdge; import androidx.appcompat.app.AppCompatActivity; import androidx.core.graphics.Insets; import androidx.core.view.ViewCompat; import androidx.core.view.WindowInsetsCompat;  public class MainActivity extends AppCompatActivity {   private static final String *TAG* = "MainActivity"; // Define a tag for logging   @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  EdgeToEdge.*enable*(this);  setContentView(R.layout.*activity\_main*);  ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  return insets;  });  Log.*e*(*TAG*, "Lab Assignment 01"); // Add the Log.e statement with a tag and message  } }  **Output:** |